



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB 7, 1994

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

Seth C. Hunt, President
USTMAN Industries, Inc.
12265 W. Bayaud Ave., Suite 110
Lakewood, Colorado 80228

Dear Mr. Hunt:

Thank you for your letters of December 17, and December 30, 1993 (enclosed) expressing concerns with my November 18, 1993 memorandum (also enclosed) regarding inconclusive results and the statistical inventory reconciliation (SIR) method of release detection. You voice several concerns, but there are two that seem most important. The first is your concern about the possibility of inspectors pursuing enforcement actions against underground storage tank (UST) facilities with as few as one result that is not conclusive during the period prior to the issuance of my memorandum. The second main concern regards the use of the term "inconclusive."

We have reviewed this issue, and our interpretation remains that stated in the November 18, memorandum, that is, that EPA's UST release detection regulations require an owner or operator to use a method that conclusively meets the performance standards to be in compliance. By conclusively we mean making a determination against a standard, such as a leak rate, with the required probabilities of detection and of false alarm. 40 CFR 280.41(a) requires generally that "tanks must be monitored at least every 30 days for releases using one of the methods listed in 280.43(d) through (h)...." SIR, when used as a 30-day method, falls under 280.43(h), which states that "any other type of release detection method, or combination of methods, can be used if: (1) It can detect a 0.2 gallon per hour leak rate or a release of 150 gallons within a month with a probability of detection of 0.95 and a probability of false alarm of 0.05..." (emphasis added). A result that is not conclusive indicates that the method, as performed in a particular instance, cannot meet the required performance standard. Therefore, if this test is the only one conducted during a 30-day period, the owner or operator is not in compliance with the regulations.

In addition 40 CFR 280.40(a)(2) requires that methods be "installed, calibrated, operated and maintained in accordance with the manufacturer's instructions, including routine maintenance..." It is the responsibility of owners and operators to collect data that is complete enough and of sufficient quality to perform leak detection properly. In cases of results which are not conclusive and which are due to none error on the part of the party using the method, it is likely that such results could indicate a violation of this provision as well.

In response to your first main concern, contrary to the assertion in your letter, this is not a new requirement, but a clarification of how the existing requirements apply to SIR. However, we understand that some people have not had this understanding. Therefore, in cases of a lack of a conclusive SIR result for a single month in the past, by copy of this letter, we encourage States and Regions to consider, among other factors, the efforts of owners and operators to comply in assessing the appropriate enforcement response, if any. This is in keeping with the enforcement discretion I noted in my previous memorandum.

In addition, my memorandum stated that inspectors at sites using SIR will review monthly test results for 12 consecutive months. Of course, this is not the case if the facility had begun using SIR more recently than 12 months ago. For whatever monthly leak detection method or combination of methods, owners and operators must, per 280.45(b), maintain records of monitoring for at least one year, or another reasonable period of time determined by the implementing agency.

Your second main concern is that the interpretation could be applied only to SIR results that use the term “inconclusive,” and not to results that are reported in some other way. To restate, owners and operators relying on SIR to meet monthly leak detection requirements must obtain a conclusive result of a test which can meet the performance standard of 40 CFR 280.43(h) (1) A lack of this conclusive result may be indicated in various ways; the use of the term “inconclusive” is only one of the ways.

Another concern you express is about the initial evaluation of vendor's SIR methods, which typically are third-party certifications following guidance in EPA's Standard Test Procedures for Evaluating Leak Detection Methods. It is true that in this evaluation results that are not conclusive are acknowledged in the procedures, but these evaluations are intended to demonstrate that the method is generally capable of meeting the performance standard, not that it can in any particular instance.

You also express the opinion that, in lieu of the reasoning above, EPA should interpret the release reporting requirements of 40 CFR 280.50(c) as requiring that results that are not conclusive be treated as suspected releases. However, results that are not conclusive do not constitute “monitoring results” that “indicate a release may have occurred.” The lack of a conclusive result simply indicates that it was not possible, using the data available, to determine if a release of 0.2 gallons per hour had occurred within the probabilities of detection and false alarm required by EPA’s regulations. These requirements, though related to the release detection requirements noted above, do not address the actual performance of release detection, and therefore cannot be relied on for a determination of compliance with the release detection requirements.

I want to reiterate that we understand that conclusive results may not be possible in a small percentage of the tank data that are analyzed each month with SIR, as with other methods, and that there are several reasons for this. We know that an important difference between SIR and other methods is that, because SIR depends on data collected over a period of several days, a retest cannot be conducted as quickly as with other methods. Our goal is to promote compliance by encouraging effective leak detection practices. Our interpretation is in keeping with the regulations’ emphasis on frequent monitoring as important in protecting the environment. I also would like to reiterate that

information on the performance of SIR in the field would be of great interest to regulators. I hope that this letter is helpful in addressing your concerns.

Sincerely,

/s/

David W. Ziegele, Director
Office of Underground Storage Tanks

Enclosures: 11/18/93 letter from David Ziegele
 12/17/93 letter from Seth Hunt (without enclosure)
 12/30/93 letter from Seth Hunt (without enclosure)

cc: UST/LUST Regional Program Managers
 UST/LUST Regional Branch chiefs
 UST/LUST Regional Attorneys
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